



IJT BOILERS

Vinasse/Slop Fired Boilers

for Zero Liquid Discharge in Distilleries



Supporting Fuel



Bagasse



Rice Husk



Wood Chips



Coal



ENGINEERING FOR EXCELLENCE



Vinasse/Slop Fired Boilers

FEATURES

PROVEN TRAVELLING GRATE TECHNOLOGY

- Wide fuel flexibility (Bagasse / Rice Husk / Wood Chips / Coal)
- Minimum maintenance
- Enhanced up-time

COMPLETE COMBUSTION

- High Pressure atomization of slop
- Location of slop nozzles at appropriate height on furnace water wall
- Standard slop gun for continuous operation

3 PASS DESIGN

- Efficient combustion in tall furnace
- Ash bridging eliminated due to wide transverse pitch of heating surfaces in convective pass
- Predust Collector located Upstream Economiser and Air Preheater to reduce dust load before entering pollution control equipment

A Few References

- 80 TPH, DSCL Sugars, Ajbapur (U.P.), India
- 75 TPH, Balrampur Chini Mills Ltd. Maizapur, Gonda (U.P.), India
- 60 TPH, Bajaj Hindusthan Sugar Ltd., Rudhoul, Basti (U.P.), India
- 55 & 45 TPH, Avadh Sugar & Energy Ltd., Hargaon, Sitapur & Seohara, Bijnor (U.P.), India
- 52 TPH, Shri Sai Priya Sugars Ltd. (Nirani Group) Karnataka, India
- 52 TPH, Pioneer Distillery Ltd. (United Spirits Ltd.) Maharashtra, India
- 47 TPH, Nanglamal Sugar Complex (Mawana Group), Meerut, (U.P.), India
- 46.8 TPH, Bannari Amman Sugars Ltd., Mysore, Karnataka, India
- 40 TPH, Saraswati Sugar Mills Ltd., Yamunanagar (Haryana), India
- 40 TPH, Azucarera Juan M Teran SA, Argentina
- 40 TPH, Balrampur Chini Mills Ltd. (U.P.), India
- 40 TPH, Dwarikesh Sugars, Bijnor (U.P.), India

LOWEST SUPPORT FUEL CONSUMPTION DUE TO MINIMUM AUXILIARY STEAM REQUIREMENT

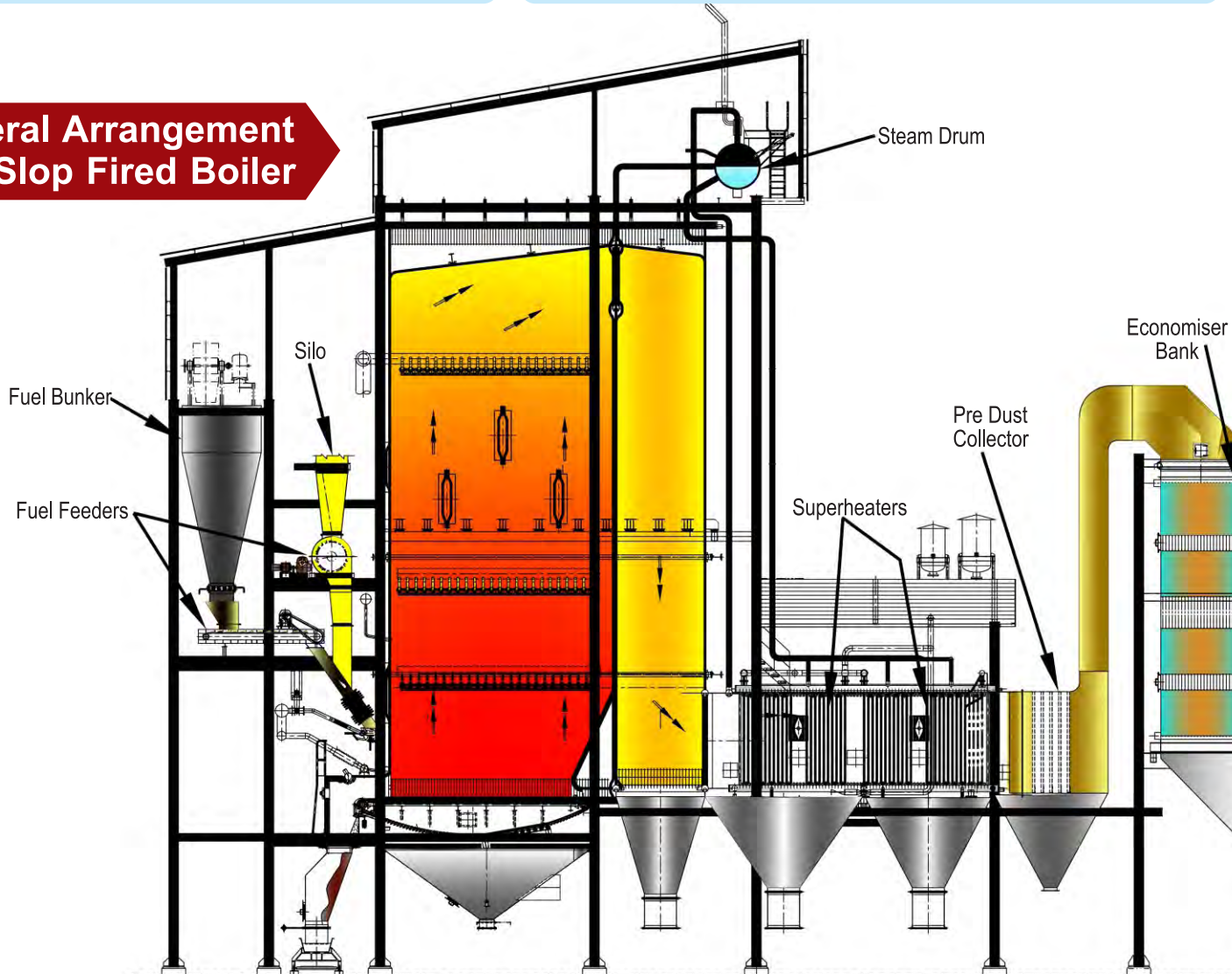
REPEAT ORDERS

Dhampur • DCM Shriram • Bajaj
 Avadh • Dalmia • Dwarikesh
 Balrampur • Rana • Nirani

More than 120 DAYS of Continuous Operation

at
Balrampur Chini Mills, Balrampur
DSCL Sugar, Hariawan with Bagasse as Support Fuel

General Arrangement of a Slop Fired Boiler

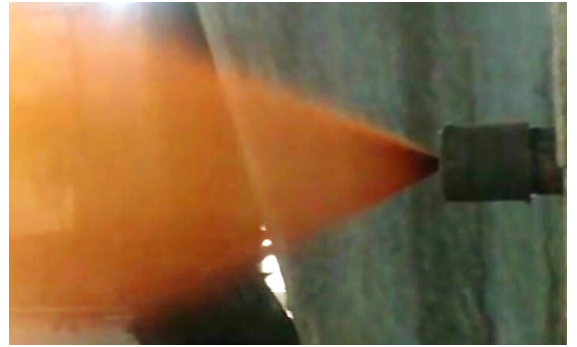


ONLINE CLEANING SYSTEM

- Easy removal of slop gun for cleaning without stopping boiler
- Mechanically atomised slop guns reduces auxiliary steam requirement hence saving in fuel
- Steam operated soot blowers for Super Heater and other convective heating surfaces to ensure efficient heat transfer

SPECIALLY DESIGNED AIR POLLUTION CONTROL EQUIPMENT

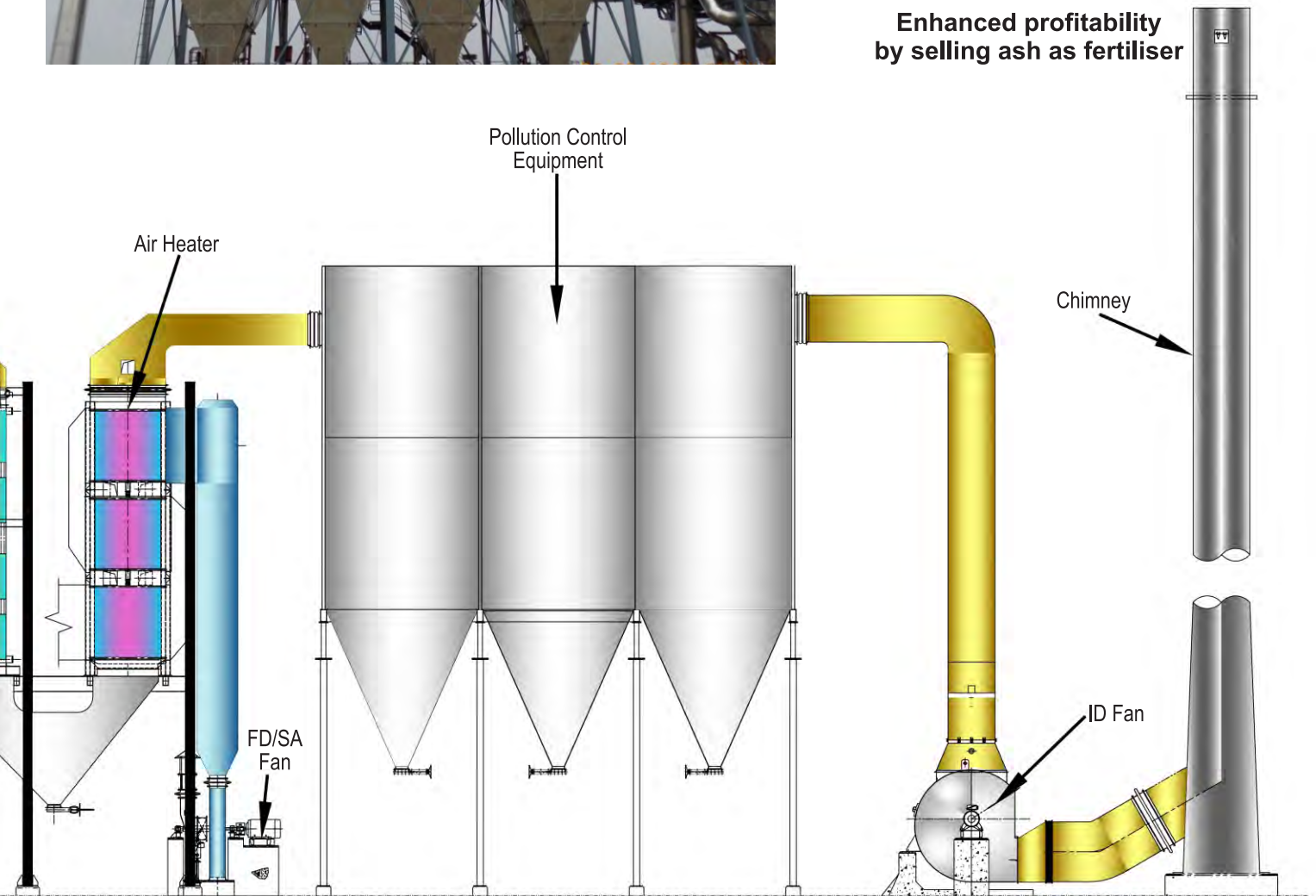
- Specially designed Pollution Control Equipment in combination with Pre-Dust Collector:
 - Higher spacing between Electrodes
 - Special type of TR Set Controllers
 - Short Electrode height for effective rapping
 - ODC <math><30\text{mg}/\text{Nm}^3</math> can be achieved
- Bag Filter with low air to cloth ratio and suitable bag material



Slop atomizing gun



Enhanced profitability
by selling ash as fertiliser



40 TPH, 45 kg/sq.cm. (g), 400 Deg. C, TG Boiler
supplied to Balrampur Chini Mills Ltd., India



55 TPH, 45 kg/sq.cm. (g), 400 Deg. C, TG Boiler
supplied to DSCL Sugars, Hariawan, India



12.5 TPH, 45 kg/sq.cm. (g), 410 Deg. C, TG Boiler
supplied to The Kisan Sakhari Chini Mills Ltd.,
Sneh Road, India



80 TPH, 45 kg/sq.cm. (g),
400 Deg. C, TG Boiler
supplied to DSCL Sugars,
Ajabpur, India



Isgec Offerings

STEAM GENERATORS

- Pulverised Coal Fired (PC)
- Circulating Fluidised Bed Combustion (CFBC)
- Atmospheric Fluidised Bed Combustion (AFBC)
- Travelling / Pulsating / Pinhole / Dumping Grate
- Oil & Gas Fired
- Heat Recovery Steam Generators
- Waste to Energy
- Waste Heat Recovery
- Slop / Spent Wash / Vinasse Fired

AUXILIARY EQUIPMENT *

- Air Pollution Controller (ESP)
- Deaerator / Fans
- Valves
- Electricals & Instrumentations
- Burner
- Bed Ash Coolers
- DCS
- Feeders
- Pumps

STEAM GENERATOR SERVICES

- Site Construction & Commissioning
- Retrofitting and Modernisation
- Replacement / Upgradation of Parts
- Troubleshooting & Services
- Residual Life Assessment (RLA) Studies
- Training
- Spares
- Operation & Maintenance

EPC PROJECTS

- Independent Power Plants
- Cogeneration Plants
- Sugar Plants
- Material Handling
- Water Treatment Plants
- Distilleries

* Only available with the Boiler

**Feed Cycle Equipment (HP Heater, LP Heater & Condenser)
Process Equipment • Presses • Castings • Contract Manufacturing**



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